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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|---|---|---|
| 09/833,418 | 04/12/2001 | Sarah D. Redpath | RSW920000176US1 | 1623 |

7590 05/12/2004

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|---|---|
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| ART UNIT | PAPER NUMBER |
|---|---|
| 2672 | 11 |

DATE MAILED: 05/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

P24

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 09/833,418 | REDPATH ET AL. | |
| | Examiner | Art Unit | |
| | Javid A Amini | 2672 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims** 485/11/04

4)☑ Claim(s) 1-20 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-20 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

***Response to Arguments***

Applicant's arguments filed March 03, 2004 have been fully considered but they are not persuasive.

- Applicant on page 10 line 3 argues that the office action fails to establish a prima facie case of obviousness under rejection of 103. Examiner's reply: Applicant should carefully read the paragraph under "ESTABLISHING A PRIMA FACIE CASE OF OBVIOUSNESS". See below:

***First,***

***There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.*** Cole at the beginning of the abstract clearly discloses some suggestion and motivation of "A method and apparatus for organizing and accessing visual objects includes a navigable structure. The navigable structure includes a sequence of one or more levels with each level being a loop of visual objects interconnected by lateral links". The second reference Weinberg the same as Cole reference at the beginning of the abstract teaches some suggestion and motivation of "A visual Web site analysis program, implemented as a collection of software components, provides a variety of features for facilitating the analysis and management of web sites and Web site content. A mapping component scans a Web site over a network connection and builds a site map, which graphically depicts the URLs and links of the site. Site maps are generated using a unique layout and display methodology, which allows the user to visualize the overall architecture of the Web site. Various map navigation

and URL filtering features are provided to facilitate the task of identifying and repairing common Web site problems, such as links to missing URLs. "

***Second,***

***There must be a reasonable expectation of success.*** Cole in col. 1, lines 50-63 teaches an expectation of success. Satellite television guides, database and web navigators are all effective tools within their respective domains. Still, experience has proven that there is a continued need for improved navigation and display technologies. In particular, where a large number of visual objects are involved, it becomes difficult for the user to appreciated or remembers the overall relationship between the visual objects. As a result, the user has difficulty finding objects and remembering where objects are located within the GUI. Thus, a need exists for systems that allow users to navigate between visual objects in an intuitive and easily remembered fashion. This is particularly true in large-scale commercial applications where ease of use is often paramount.

***Finally,***

***The prior art reference (or references when combined) must teach or suggest all the claim limitations.*** The teaching of Weinberg into Cole since, these two references is directed to the process of graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent Applicant's claim invention by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's.

- Applicant on page 10 line 22 argues that the rejection uses impermissible hindsight. Examiner's reply: Impermissible Hindsight is an improper argument to

use when the prima facie case of obviousness under rejection of 103 clearly established.

- Applicant on page 11 lines 1-29 argues that the claimed invention displays object that correspond to computer components in a manner allowing a system administrator to effectively manage a computer network. Examiner's reply: the following action (comparison) would be a good example to present the broadness of the claimed language in claim 1. As for claim 1, "A method of displaying layered data, said method comprising: selecting one or more objects to be displayed in a plurality of layers; identifying a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; matching each of the objects to one of the layers; applying the display attributes corresponding to the layer for each of the matched objected; and displaying the objects with the applied display attributes, wherein the objects in a first layer from the plurality of layers are visually distinguished from the objects in the other plurality of layers based upon the display attributes of the first layer." Therefore, Cole does teach and suggest the claimed language. And also Weinberg teaches nodes to particular layers see fig. 24.
- Applicant on page 12 lines 8-15 argues that the amended claim 1 in response to the telephone interview with the Examiner, neither Cole nor Weinberg, teach or suggest the limitations. Examiner's reply: The amended claim (wherein the objects in a first layer from the plurality of layers are visually distinguished from the objects in the other plurality of layers based upon the display attributes of the

first layer), Cole in fig. 9 illustrates the objects are visually distinguished from the objects in the other of levels based upon the display attributes.

- Applicant on page 13 lines 4-10 argues that Cole provide no teaching of an attribute. Examiner's reply: With all respect to the good work of Applicant, Examiner suggests that Applicant should pay attention to the concept of the invention not to the application of the invention at this point.
- Applicant on page 14 lines 19-30 argues that the limitation to claim 1 of "rearranging the layers in response to the request...." Cole or Weinberg do not teach the limitation of claim 2. Examiner's reply: Weinberg in col. 2, lines 10-26 teaches that mapping routines of the program in-turn use this information to generate, on the computer's display screen, a graphical site map that shows the overall architecture (i.e., the structural arrangement of content objects and links) of the Web site. A user interface of the program allows the user to perform actions such as initiate and pause the scanning/mapping of a Web site, zoom in and out on portions of a site map, apply content filters to the site map to filter out content objects of specific types, and save and retrieve maps to/from disk. A map comparison tool allows the user to generate a comparison map, which highlights changes that have been made to the Web site since a previous mapping of the site.
- Applicant on page 15 lines 6-21 argues that neither Cole nor Weinberg teach or suggest, the limitation of claim 8, "determining a layer order for the plurality of layers.... ". Examiner's reply: Cole and Weinberg teach this limitation in fig. 2, and Figs. 1-6 respectively.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-20 rejected under 35 U.S.C. 103(a) as being unpatentable over Cole, and further in view of Weinberg et al. (hereinafter referred as "Weinberg").

1. Claim 1.

"A method of displaying layered data, said method comprising: selecting one or more objects to be displayed in a plurality of layers; identifying a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; matching each of the objects to one of the layers; applying the display attributes corresponding to the layer for each of the matched objected; and displaying the objects with the applied display attributes, wherein the objects in a first layer from the plurality of layers are visually distinguished from the objects in the other plurality of layers based upon the display attributes of the first layer."

Cole in abstract and also in Fig. 2 discloses a method of displaying layered data. (Cole uses a term "level", and claim language uses a term "layer"). Cole in Fig. 2 illustrates a plurality of display attributes and one or more attributes correspond to each of the levels. Cole in col. 2, lines 12-19 discloses that the navigable structure see fig. 1 may be organized using one or more themes (display attributes). For example, in the case of interactive television systems, it would be appropriate to devote each level to a different genre of programming, such as comedy movies, action movies, and so on (Examiner's interpretation: Cole is matching each of the

objects to one of the levels). As another example, an interactive learning system might devote upper levels to space and sky and lower levels to earth and sea. Cole in cols. 3 and 4, lines 65-67; lines 1-6, discloses (Examiner interpretation: the shape of an object can be considered as an attribute) different shapes are available for displaying an object. A regular person can apply the display attributes to each level, meaning one level can be shown as cylinders shape and the next level can be shown as cubes shape and etc. Cole at col. 9, line 22, discloses displaying the current visual object. But Cole does not explicitly specify display attributes corresponding to the layer for each of the matched objects. However, Weinberg at cols. 2 and 3, lines 58-67; 1-7, teaches the architecture that includes an API (application program interface) and includes API procedures ("methods") that allow other applications ("plug-ins") to, among other things, manipulate the display attributes of the nodes and links within a site map. Using these methods, a plug-in application can be added which dynamically superimposes data onto the site map by, for example, selectively modifying display colors of nodes and links, selectively hiding nodes and links, and/or attaching alphanumeric annotations to the nodes and links.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Weinberg into Cole since these two reference are directed to the process for graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent Applicant's claim invention by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's. The result would thereby aid the user.

2. Claim 2.

"The method as described in claim 1 further comprising: receiving a request from a user to rearrange the layers; rearranging the layers in response to the request, the rearranging including: re-matching one or more objects to a different layer from the plurality of layers; applying the display attributes corresponding to the different layer to the one or more re matched objects; and displaying the one or more re-matched objects". The limitations of claim 2 are similar to the limitations of claim 1, therefore see rejection of claim 1.

3. Claim 3.

"The method as described in claim 1 further comprising: reading the objects from a data store; and reading one or more object attributes corresponding to each object from the data store, wherein the matching further comprises: matching the object attributes corresponding to each object to one or more layer attributes corresponding to each layer". Cole in Fig. 1 illustrates disk and memory for storing data and also reading data object from storage environment.

4. Claim 4.

"The method as described in claim 1 further comprising: creating the objects; setting one or more object attributes corresponding to each object; and storing the object and the object attributes in a data store". Cole at col. 8, lines 62-67 teaches the limitations of claim 4. Also see Weinberg's fig. 9.

5. Claim 5.

"The method as described in claim 4 further comprising: establishing one or more relationships from at least one of the objects to one or more other objects". Cole at col. 1, lines 51-63 teaches the limitations of claim 5. Weinberg at col. 6, lines 38-54 teaches the limitations of claim 5.

6. Claim 6.

"The method as described in claim 1 wherein the display attributes are selected from the group consisting of: color hue, color value, color saturation, size, three dimensional image, two dimensional image, animation, shading, fill pattern, line pattern, line weight, opaqueness, transparency, proximity, shape, and object anomaly", according to Markush groups, Cole in Figs.3-9 illustrates the display attributes. Weinberg in Fig. 18 illustrates color coding.

7. Claim 7.

"The method as described in claim 1 further comprising: displaying one or more relationship lines connecting at least one of the objects to one or more other objects", see rejection of claim 1.

8. Claim 8.

"The method as described in claim 1 further comprising: determining a layer order for the plurality of layers, wherein the layer order determines a display emphasis corresponding to objects in the corresponding layers", Cole and Weinberg teach this limitation in fig. 2, and Figs. 1-6 respectively.

9. Claim 9.

"An information handling system comprising: one or more processors; a memory accessible by the processors; a nonvolatile storage area accessible by the processors; a display screen accessible by the processors; and a layered data display tool to display layered data on the display screen, the layered data display tool including: logic for selecting one or more objects to be displayed in a plurality of layers; identification logic to identify a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; matching logic for matching each of the objects to one of the layers; applicator logic to apply the display attributes corresponding to the layer for each of the matched objected; and display

control logic to display the objects with the applied display attributes, wherein the objects in a first layer from the plurality of layers are visually distinguished from the objects in the other plurality of layers based upon the display attributes of the first layer.", Cole in abstract and also in Fig. 2 discloses a method of displaying layered data. (Cole uses a term "level", and claim language uses a term "layer"). Cole in Fig. 2 illustrates a plurality of display attributes and one or more attributes correspond to each of the levels. Cole in col. 2, lines 12-19 discloses that the navigable structure see fig. 1 may be organized using one or more themes (display attributes). For example, in the case of interactive television systems, it would be appropriate to devote each level to a different genre of programming, such as comedy movies, action movies, and so on (Examiner's interpretation: Cole is matching each of the objects to one of the levels). As another example, an interactive learning system might devote upper levels to space and sky and lower levels to earth and sea. Cole in cols. 3 and 4, lines 65-67; lines 1-6, discloses (Examiner interpretation: the shape of an object can be considered as an attribute) different shapes are available for displaying an object. A regular person can apply the display attributes to each level, meaning one level can be shown as cylinders shape and the next level can be shown as cubes shape and etc. Cole at col. 9, line 22, discloses displaying the current visual object. But Cole does not explicitly specify display attributes corresponding to the layer for each of the matched objects. However, Weinberg at cols. 2 and 3, lines 58-67; 1-7, teaches the architecture that includes an API (application program interface) and includes API procedures ("methods") that allow other applications ("plug-ins") to, among other things, manipulate the display attributes of the nodes and links within a site map. Using these methods, a plug-in application can be added which dynamically superimposes data onto the site map by, for example,

selectively modifying display colors of nodes and links, selectively hiding nodes and links, and/or attaching alphanumeric annotations to the nodes and links.

Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Weinberg into Cole since these two reference are directed to the process for graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent Applicant's claim invention by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's. The result would thereby aid the user.

10. Claim 10.

"The information handling system as described in claim9 further comprising: a rearranging request received from a user; rearranging logic to rearrange the displayed layers, the rearranging logic including: re-matching logic to re-match one or more objects to a different layer from the plurality of layers; application logic to apply the display attributes corresponding to the different layer to the one or more re-matched objects; and display logic to display the one or more re matched objects". See rejection of claim 9.

11. Claim 11.

"The information handling system as described in claim 9 wherein the display attributes are selected from the group consisting of: color hue, color value, color saturation, size, three dimensional image, two dimensional image, animation, shading, fill pattern, line pattern, line weight, opaqueness, transparency, proximity, shape, and object anomaly", according to Markush

groups, Cole in Figs.3-9 illustrates the display attributes. Weinberg in Fig. 18 illustrates color coding.

12. Claim 12.

"The information handling system as described in claim 9 further comprising: logic to read the objects from a data store within then on volatile storage area; and logic to read one or more object attributes corresponding to each object from the data store, wherein the matching logic further comprises: logic to match the object attributes corresponding to each object to one or more layer attributes corresponding to each layer", Cole in Fig. 1 illustrates disk and memory for storing data and also reading data object from storage environment.

13. Claim 13.

"A computer program product stored on a computer usable medium for displaying layered data, said computer program product comprising: means for selecting one or more objects to be displayed in a plurality of layers; means for identifying a plurality of display attributes, wherein one or more of the display attributes corresponds to each of the layers; means for matching each of the objects to one of the layers; means for applying the display attributes corresponding to the layer for each of the matched objected; and means for displaying the objects with the applied display attributes, wherein the objects in a first layer from the plurality of layers are visually distinguished from the objects in the other plurality of layers based upon the display attributes of the first layer.", Cole in abstract and also in Fig. 2 discloses a method of displaying layered data. (Cole uses a term "level", and claim language uses a term "layer"). Cole in Fig. 2 illustrates a plurality of display attributes and one or more attributes correspond to each of the levels. Cole in col. 2, lines 12-19 discloses that the navigable structure see fig. 1 may be

organized using one or more themes (display attributes). For example, in the case of interactive television systems, it would be appropriate to devote each level to a different genre of programming, such as comedy movies, action movies, and so on (Examiner's interpretation: Cole is matching each of the objects to one of the levels). As another example, an interactive learning system might devote upper levels to space and sky and lower levels to earth and sea. Cole in cols. 3 and 4, lines 65-67; lines 1-6, discloses (Examiner interpretation: the shape of an object can be considered as an attribute) different shapes are available for displaying an object. A regular person can apply the display attributes to each level, meaning one level can be shown as cylinders shape and the next level can be shown as cubes shape and etc. Cole at col. 9, line 22, discloses displaying the current visual object. But Cole does not explicitly specify display attributes corresponding to the layer for each of the matched objects. However, Weinberg at cols. 2 and 3, lines 58-67; 1-7, teaches the architecture that includes an API (application program interface) and includes API procedures ("methods") that allow other applications ("plug-ins") to, among other things, manipulate the display attributes of the nodes and links within a site map. Using these methods, a plug-in application can be added which dynamically superimposes data onto the site map by, for example, selectively modifying display colors of nodes and links, selectively hiding nodes and links, and/or attaching alphanumeric annotations to the nodes and links. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teaching of Weinberg into Cole since these two reference are directed to the process for graphically or visually representing information objects (GUI). Weinberg represents WEB sites and node structures graphically and Cole represents visual (graphically) navigation of information objects. Cole's invention would represent

Applicant's claim invention by integrating a part from Weinberg that is "dynamically superimposes data onto the site map" into Cole's. The result would thereby aid the user.

14. Claim 14.

"The computer program product as described in claim 13 further comprising: means for receiving a request from a user to rearrange the layers; means for rearranging the layers in response to the request, the rearranging including: means for re-matching one or more objects to a different layer from the plurality of layers; means for applying the display attributes corresponding to the different layer to the one or more re-matched objects; and means for displaying the one or more re-matched objects". See rejection of claim 13.

15. Claim 15.

"The computer program product as described in claim 13further comprising: means for reading the objects from a data store; and means for reading one or more object attributes corresponding to each object from the data store, wherein the matching further comprises: means for matching the object attributes corresponding to each object to one or more layer attributes corresponding to each layer", Cole in Fig. 1 illustrates disk and memory for storing data and also reading data object from storage environment. Weinberg in Fig. 21 illustrates an icon for storing data objects.

16. Claim 16.

"The computer program product as described in claim 13 further comprising: means for creating the objects; means for setting one or more object attributes corresponding to each object; and means for storing the object and the object attributes in a data store". Cole at col. 8, lines 62-67 teaches the limitations of claim 4. Also see Weinberg's fig. 9.

17. Claim 17.

"The computer program product as described in claim 16 further comprising: means for establishing one or more relationships format least one of the objects to one or more other objects". Cole at col. 1, lines 51-63, teaches the limitations of claim 5. Weinberg at col. 6, lines 38-54 teaches the limitations of claim 5.

18. Claim 18.

"The computer program product as described in claim 13 wherein the display attributes are selected from the group consisting of: color hue, color value, color saturation, size, three dimensional image, two dimensional image, animation, shading, fill pattern, line pattern, line weight, opaqueness, transparency, proximity, shape, and object anomaly", according to Markush groups, Cole in Figs.3-9 illustrates the display attributes. Weinberg in Fig. 18 illustrates color-coding.

19. Claim 19.

"The computer program product as described in claim 13 further comprising: means for displaying one or more relationship lines connecting at least one of the objects to one or more other objects", see rejection of claim 13.

20. Claim 20.

"The computer program product as described in claim 13further comprising: means for determining a layer order for the plurality of layers, wherein the layer order determines a display emphasis corresponding to objects in the corresponding layers". Cole and Weinberg teach this limitation in fig. 2, and Figs. 1-6 respectively.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Javid A Amini whose telephone number is 703-605-4248. The examiner can normally be reached on 8-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Razavi can be reached on 703-305-4713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Javid A Amini
Examiner
Art Unit 2672

Javid Amini

JEFFERY BRIER
PRIMARY EXAMINER